

ABSTRACT OF THE DISCLOSURE

An image pickup apparatus is capable of performing an image pickup with pattern projection on an object to obtain three-dimensional information on the object, 5 and an image pickup without pattern projection. The image pickup apparatus comprises an exposure level determination section configured to determine a predetermined exposure level needed by an image pickup device of the image pickup apparatus, and 10 a shutter speed determination section configured to determine a first shutter speed to achieve the predetermined exposure level determined by the exposure level determination section in the image pickup without pattern projection, and a second shutter speed not slower than the first shutter speed. The image pickup 15 with pattern projection is conducted by use of the second shutter speed.